



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/729,253	12/05/2003	Angela Michelle Hall	1322/123/2	1192
25297 7590 04/04/2007 JENKINS, WILSON, TAYLOR & HUNT, P. A. 3100 TOWER BLVD SUITE 1200 DURHAM, NC 27707			EXAMINER KISS, ERIC B	
			ART UNIT	PAPER NUMBER
			2192	
SHORTENED STATUTORY PERIOD OF RESPONSE		MAIL DATE	DELIVERY MODE	
3 MONTHS		04/04/2007	PAPER	

**Please find below and/or attached an Office communication concerning this application or proceeding.**

If NO period for reply is specified above, the maximum statutory period will apply and will expire 6 MONTHS from the mailing date of this communication.

<b>Office Action Summary</b>	<b>Application No.</b> 10/729,253	<b>Applicant(s)</b> HALL, ANGELA MICHELLE	
	<b>Examiner</b> Eric B. Kiss	<b>Art Unit</b> 2192	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

#### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

#### Status

- 1) ☒ Responsive to communication(s) filed on 05 December 2003.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

#### Disposition of Claims

- 4) ☒ Claim(s) 1-28 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-28 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

#### Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 05 December 2003 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

#### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

#### Attachment(s)

- |                                                                                                            |                                                                                         |
|------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)                                | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                       | 5) <input type="checkbox"/> Notice of Informal Patent Application                       |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)<br>Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____                                                |

### DETAILED ACTION

1. Claims 1-28 have been examined.

#### *Specification*

2. The disclosure is objected to because it contains an embedded hyperlink and/or other form of browser-executable code. Applicant is required to delete the embedded hyperlink and/or other form of browser-executable code. See MPEP § 608.01.
3. The disclosure is object to because it fails to comply with 37 CFR 1.52. Specifically, the tables in the specification contain text on a shaded background which is not, "Presented in a form having sufficient clarity and contrast . . . ," as required by 37 CFR 1.52(a)(1)(v), and the specification contains more than a single column of text at page numbers 13 and 18, as prohibited by 37 CFR 1.52(b)(2)(iii).

#### *Claim Rejections - 35 USC § 101*

4. 35 U.S.C. 101 reads as follows:

Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

5. Claims 1-28 are rejected under 35 U.S.C. 101 because the claimed invention is directed to non-statutory subject matter.

Descriptive material can be characterized as either "functional descriptive material" or "nonfunctional descriptive material." In this context, "functional descriptive material" consists of data structures and computer programs which impart functionality when employed as a computer component. (The definition of "data structure" is "a physical or logical relationship among data elements, designed to support specific data manipulation functions." The New IEEE Standard Dictionary of Electrical and Electronics Terms 308 (5th ed. 1993).) "Nonfunctional

Art Unit: 2192

descriptive material” includes but is not limited to music, literary works and a compilation or mere arrangement of data. Both types of “descriptive material” are nonstatutory when claimed as descriptive material *per se*. *In re Warmerdam*, 33 F.3d 1354, 1361, 31 USPQ2d 1754, 1760 (claim to a data structure *per se* held nonstatutory).

Data structures not claimed as embodied in computer-readable media are descriptive material *per se* and are not statutory because they are not capable of causing functional change in the computer. *See, e.g., In re Warmerdam*, 33 F.3d 1354, 1361, 31 USPQ2d 1754, 1760 (claim to a data structure *per se* held nonstatutory). Such claimed data structures do not define any structural and functional interrelationships between the data structure and other claimed aspects of the invention which permit the data structure’s functionality to be realized. In contrast, a claimed computer-readable medium encoded with a data structure defines structural and functional interrelationships between the data structure and the computer software and hardware components which permit the data structure’s functionality to be realized, and is thus statutory.

Similarly, computer programs claimed as computer listings *per se*, *i.e.*, the descriptions or expressions of the programs, are not physical “things.” They are neither computer components nor statutory processes, as they are not “acts” being performed. Such claimed computer programs do not define any structural and functional interrelationships between the computer program and other claimed elements of a computer which permit the computer program’s functionality to be realized. In contrast, a claimed computer-readable medium encoded with a computer program is a computer element which defines structural and functional interrelationships between the computer program and the rest of the computer which permit the

Art Unit: 2192

computer program's functionality to be realized, and is thus statutory. *See In re Lowry*, 32 F.3d 1579, 1583-84, 32 USPQ2d 1031, 1035.

Claims 1-12 recite a "system" comprising a series of elements that can be reasonably interpreted as software, *per se*. The claims do not define any structural and functional interrelationships between the software elements and a computer that would permit the described functionality to be realized when the software is employed as a computer component. Accordingly, claims 1-12 appear to merely set forth functional descriptive material *per se*, which is nonstatutory.

A claim that requires one or more acts to be performed defines a process. However, not all processes are statutory under 35 U.S.C. § 101. To be statutory, a claimed process must either: (A) result in a physical transformation for which a practical application is either disclosed in the specification or would have been known to a skilled artisan, or (B) be limited to a practical application which produces a useful, tangible, and concrete result. *See Diamond v. Diehr*, 450 U.S. 175, 183-84, 209 USPQ 1, 9 (1981) (quoting *Cochrane v. Deener*, 94 U.S. 780, 787-88 (1876)) ("A [statutory] process is a mode of treatment of certain materials to produce a given result. It is an act, or a series of acts, performed upon the subject-matter to be transformed and reduced to a different state or thing . . . . The process requires that certain things should be done with certain substances, and in a certain order; but the tools to be used in doing this may be of secondary consequence."). *See also In re Alappat*, 33 F.3d 1526, 1543, 31 USPQ2d 1545, 1556-57 (quoting *Diehr*, 450 U.S. at 192, [209 USPQ at 10]).

In *State Street*, the Federal Circuit examined some of its prior section 101 cases, observing that the claimed inventions in those cases were each for a “practical application of an abstract idea” because the elements of the invention operated to produce a “useful, concrete and tangible result.” *State St. Bank & Trust v. Signature Fin. Group*, 149 F.3d 1368, 1373-74, 47 USPQ2d 1596, 1601-02 (Fed Cir. 1998). For example, the court in *State Street* noted that the claimed invention in *Alappat* “constituted a practical application of an abstract idea (a mathematical algorithm, formula, or calculation), because it produced ‘a useful, concrete and tangible result’—the smooth waveform.” *Id.* Similarly, the claimed invention in *Arrhythmia* “constituted a practical application of an abstract idea (a mathematical algorithm, formula, or calculation), because it corresponded to a useful, concrete and tangible thing—the condition of a patient’s heart.” *Id.* (citing *Arrhythmia Research Tech. V. Corazonix Corp.*, 958 F.2d 1053, 22 USPQ2d 1033 (Fed. Cir. 1992)).

In determining whether the claim is for a “practical application,” the focus is not on whether the steps taken to achieve a particular result are useful, tangible and concrete, but rather that the final result is “useful, tangible and concrete.” The Federal Circuit further ruled that it is of little relevance whether a claim is directed to a machine or process for the purpose of a § 101 analysis. *AT&T Corp. v. Excel Commc’ns*, 172 F.3d 1352, 1358, 50 USPQ2d 1447, 1451 (Fed. Cir. 1999).

Claims 1-28 are directed to systems (claims 1-12), methods (claims 13-23) and computer program products (claims 24-28) for translating computer code. This claimed subject matter lacks a practical application of a judicial exception (law of nature, abstract idea, naturally occurring article/ phenomenon) since it fails to produce a useful, concrete and tangible result.

Art Unit: 2192

Specifically, the claimed subject matter does not produce a tangible result because the claimed subject matter fails to produce a result that is limited to having real world value rather than a result that may be interpreted to be abstract in nature as, for example, a thought, a computation, or manipulated data. More specifically, the claimed subject matter describes at best the performing of a process that is not tied to any particular tangible output capable of being, for example, stored, displayed, or conveyed in any manner causing any useful functional or structural change in a computer system so as to achieve a practical application. This produced result remains in the abstract and, thus, fails to achieve the required status of having real world value.

6. To expedite a complete examination of the instant application, the claims rejected under 35 U.S.C. §101 (non-statutory) above are further rejected as set forth below in anticipation of Applicant amending these claims to place them within the four statutory categories of invention.

***Claim Rejections - 35 USC § 102***

7. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

8. Claims 1-4, 7-16, and 19-28 are rejected under 35 U.S.C. 102(e) as being anticipated by U.S. Patent App. Pub. No. 2002/0147620 (Walsh).

Regarding claim 1, Walsh discloses:

(a) a core rules engine containing computer code implementing industry standards reporting rules, the core rules engine being updateable by a programmer based on changes to the industry standards reporting rules (see, e.g., paragraph [0052]);

(b) a user-data-to-metric-data mapping data structure including end-user defined links between user-specific data formats and locations and the rules defined in the core reporting engine (see, e.g., paragraphs [0038] and [0039]); and

(c) a translator for translating the computer code in the core rules engine to user-specific industry standards rules application computer code based on the links in the user-data-to-metric-data mapping data structure (see, e.g., paragraphs [0044] through [0049]; paragraph [0056]).

Regarding claim 2, Walsh further discloses the computer code in the core rules engine is based only on industry standards reporting requirements (see, e.g., paragraph [0042]).

Regarding claim 3, Walsh further discloses the computer code in the core rules engine is independent of the user data formats and locations (see, e.g., paragraph [0035]).

Regarding claim 4, Walsh discloses the industry standards reporting rules include TL 9000 reporting rules (see, e.g., paragraphs [0001] and [0042]).

Regarding claim 7, Walsh further discloses the user-data-to-metric-data mapping data structure associates end user variable names with variable names used in the computer code of the core rules engine (see, e.g., paragraphs [0039], [0044] through [0049], and [0056]).

Regarding claim 8, Walsh further discloses the user-data-to-metric-data mapping data structure comprises a table (see, e.g., paragraph [0051]).

Regarding claim 9, Walsh further discloses the computer code in the core rules engine is in source code format and wherein the translator is adapted to translate the computer code in the core rules engine into the user-specific computer code, which is also in source code format (see, e.g., paragraphs [0035] and [0040]).

Regarding claim 10, Walsh further discloses a core report generation engine for implementing industry standards reporting rules (see, e.g., paragraphs [0044] through [0049]; paragraph [0056]).

Regarding claim 11, Walsh further discloses a user-report-to-metric-data mapping data structure for mapping user-specific report formats to industry standard variable names (see, e.g., paragraphs [0039], [0044] through [0049], and [0056]), wherein the translator is adapted to translate the computer code in the core report generation engine to user-specific computer code based on the user-report-to-metric-data mapping table (see, e.g., *Id.*), wherein a user generates processed data in industry standard format by applying the rules application computer code to raw measurements data (see, e.g., paragraph [0054]) and wherein the user generates customized reports by applying the user-specific report generation computer code to the processed data (see, e.g., paragraphs [0054] and [0056]).

Regarding claim 12, Walsh further discloses a web interface for providing end user access to the user-data-to-metric-data mapping data structure (see, e.g., paragraphs [0025], [0028], and [0035]).

Regarding claim 13, Walsh discloses:

(a) providing core industry standards rules computer code based on core industry standards reporting rules (see, e.g., paragraph [0052]);

(b) providing a user-data-to-metric-data mapping data structure including end-user-modifiable fields for linking user-specific data formats and locations to the core industry standards reporting rules in the core industry standards reporting computer code (see, e.g., paragraphs [0038] and [0039]); and

(c) automatically translating the core industry standards rules computer code into user-specific industry standards rules computer code using the links defined in the user-data-to-metric-data mapping data structure (see, e.g., paragraphs [0044] through [0049]; paragraph [0056]).

Regarding claim 14, Walsh further discloses providing core industry standards rules computer code based on industry standards reporting rules includes providing core industry standards rules computer code that is independent of user-specific data formats and locations (see, e.g., paragraph [0035]).

Regarding claim 15, Walsh further discloses providing core industry standards rules computer code based on industry standards reporting rules includes providing core industry standards rules computer code that is based only on industry standards reporting rules (see, e.g., paragraph [0042]).

Regarding claim 16, Walsh further discloses providing core industry standards rules computer code includes providing core industry standards computer code based on telecommunications industry standards reporting rules (see, e.g., paragraphs [0001] and [0042]).

Regarding claim 19, Walsh further discloses providing a user-data-to-metric-data mapping data structure includes providing a user-data-to-metric-data mapping table that is modifiable by an end user (see, e.g., paragraphs [0038], [0039] and [0051]).

Regarding claim 20, Walsh further discloses automatically translating the core industry standards rules computer code in to user-specific industry standards rules application computer code includes executing a translation script that generates the user-specific industry standards rules computer code based on links in the user-data-to-metric-data mapping data structure (see, e.g., paragraphs [0035] and [0040]).

Regarding claim 21, Walsh further discloses updating the user-specific industry standards rules computer code by replacing the core industry standards rules application computer code with a new version based on new industry standards reporting rules and re-executing the translation step (see, e.g., paragraphs [0035], [0040], and [0052]).

Regarding claim 22, Walsh further discloses applying the user-specific industry standards rule application computer code to user data to produce processed data in accordance with industry standards reporting rules (see, e.g., paragraphs [0044] through [0049]; paragraph [0056]).

Regarding claim 23, Walsh further discloses (a) providing a core report generation engine for generating reports in accordance with industry standards report requirements (see, e.g., paragraph [0052]); (b) providing a user-report-to-metric-data mapping data structure containing rules for mapping user-specific report formats to industry standards variables (see, e.g., paragraphs [0038] and [0039]); (c) automatically translating the core report generation engine into a user-specific report generation engine using the user-report-to-metric-data mapping data structure (see, e.g., paragraphs [0044] through [0049]; paragraph [0056]); and (d) applying the user-specific report generation engine to the processed data to generate user-specific reports (see, e.g., paragraphs [0044] through [0049]; paragraph [0056]).

Regarding claim 24, Walsh discloses a computer program product comprising computer executable instructions embodied in a computer readable medium (see, e.g., paragraph [0025]), the computer program product comprising: (a) first computer code for implementing industry standards data collection rules (see, e.g., paragraph [0052]); (b) a first data structure including user-data-to-metric-data mapping rules mapping user data sources and locations with industry standards metrics (see, e.g., paragraphs [0038] and [0039]); and (c) second computer code for translating the first computer code into user specific rules application computer code based on the user to data mapping rules in the user-data-to-metric-data mapping data structure (see, e.g., paragraphs [0044] through [0049]; paragraph [0056]).

Regarding claim 25, Walsh further discloses the first computer code implements TL 9000 reporting rules (see, e.g., paragraphs [0001] and [0042]).

Regarding claim 26, Walsh further discloses the first data structure includes fields that are customizable by an end user when user data format or location changes (see, e.g., paragraphs [0038], [0039] and [0051]).

Regarding claim 27, Walsh further discloses wherein the second computer code is usable by a plurality of different end users with different user-data-to-metric-data mapping data structures to generate user specific report generation computer code tailored to each individual end user (see, e.g., paragraphs [0054] and [0056]).

Regarding claim 28, Walsh further discloses: (a) third computer code for implementing industry standards reporting rules (see, e.g., paragraph [0052]); and (b) a second data structure including user-report-to-metric-data mapping rules (see, e.g., paragraphs [0038] and [0039]), and wherein the second computer code is adapted to translate the third computer code into user-

Art Unit: 2192

specific report generation computer code based on the user-report-to-metric-data mapping rules in the second data structure (see, e.g., paragraphs [0044] through [0049]; paragraph [0056]).

***Claim Rejections - 35 USC § 103***

9. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

10. Claims 5, 6, 17, and 18 are rejected under 35 U.S.C. 103(a) as being unpatentable over U.S. Patent App. Pub. No. 2002/0147620 (Walsh) in view of applicant's admitted prior art.

Regarding claims 5, 6, 17, and 18, although Walsh fails to expressly disclose the industry standard reporting rules including pharmaceutical industry standards reporting rules or financial industry standards reporting rules, the system disclosed by Walsh is taught as being configurable to implement other types of quality assurance and/or auditing programs (see, e.g., Walsh at paragraph [0042]), and applicant admits that such pharmaceutical industry standards reporting rules or financial industry standards reporting rules are known (see, e.g., Specification at pp. 5-6). Therefore, it would have been obvious to one of ordinary skill in the art to modify the system of Walsh to implement other types of quality assurance and/or auditing systems, such as pharmaceutical industry standards reporting rules or financial industry standards reporting rules, in order to gain the advantages of flexible configuration taught by Walsh (see, e.g., Walsh at paragraph [0042]).

Art Unit: 2192

*Conclusion*

11. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

12. Any inquiry concerning this communication or earlier communications from the Examiner should be directed to Eric B. Kiss whose telephone number is (571) 272-3699. The Examiner can normally be reached on Tue. - Fri., 7:00 am - 4:30 pm. The Examiner can also be reached on alternate Mondays.

If attempts to reach the Examiner by telephone are unsuccessful, the Examiner's supervisor, Tuan Dam, can be reached on (571) 272-3695. The fax phone number for the organization where this application or proceeding is assigned is (571) 273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Any inquiry of a general nature should be directed to the TC 2100 Group receptionist: 571-272-2100.



Eric B. Kiss  
March 31, 2007